



## Eagle Ford

### Top Questions Asked about the Eagle Ford

Please click on the question to reveal the answer.

#### What are the sizes of the proration units for the Eagle Ford Shale Fields?

Presently, the proration units range from 40 acres to 640 acres. Need to review the individual field rules for each of the Eagle Ford Shale Fields.

#### Explain why a surface location for horizontal wells is not required to be located on the lease that is being drilled?

Many wells are being drilled horizontally or deviated from offsite locations to reach potential producing horizons that may be beneath city parks, water bodies or housing developments, where a surface location may not be desirable or available. It is not unusual for an operator to obtain surface rights from which to drill a well from an adjacent, more desirable location.

#### Explain why a surface location for horizontal wells can be located on a lease closer to a lease line than the field rules require?

The field rules for a horizontal well regulate specifically the “horizontal drainhole” which is defined in Rule 86 as “That portion of the wellbore drilled in the correlative interval, between the penetration point and the terminus.” The surface location, therefore, can be located anywhere on the lease since this is not considered part of the horizontal drainhole that is within the correlative interval where production may occur.

#### What are the plastic lining requirements for drilling pits and frac water pits?

Railroad Commission rules require an operator to take precautions to prevent pollution of surface and subsurface water, but do not include specific requirements for plastic liners in drilling pits and frac water pits. Many operators use liners in areas where the soil is permeable. Local governments may require the use of lined pits.

#### What is the requirement for reporting production for a well after it has been completed and how do I find out what has been reported?

Railroad Commission rules require an operator to file a well completion form with the Commission 30 days after completion of the well or 90 days after completion of the drilling operation, whichever is earliest. (16 TAC §3.16) Production must be filed monthly starting the month after the well begins producing. You can find production information on the RRC website by using the Production Data Query application or the Production Permit Query application.

#### How long does the RRC allow an operator to flare gas from a new well completion until the gas is then connected to the pipeline?

Railroad Commission regulations generally allow gas to be released for a period not to exceed ten (10) producing days after initial completion, recompletion, in another field, or workover operations in the same field. However, the Commission may grant exceptions to this rule under certain circumstances. See 16 TAC §3.32

### What is the typical size, shape and restoration of a drilling location in the Eagle Ford?

There are no standard location shapes or sizes; each rig has its own individual "footprint." Texas law allows an operator the right to use as much of the surface as necessary to explore, drill and produce the minerals from a property. Leases or ordinances may limit the amount of surface that an operator may use and dictate restoration of the site.

### What is law regarding ingress and egress using existing roads?

An operator has the right of ingress and egress to the property for the purpose of exploring, drilling and producing the minerals. This right cannot be denied, but it does not require surface owners to allow operators to use existing roads. Should disagreements occur, it is a civil issue that must be pursued through the court system.

### What can be done about the stormwater runoff?

The Commission's regulations ensure the quality of waters (and land) that could be potentially impacted by an oil and gas operator's activity. The Commission's current rules defines "pollution of surface or subsurface water" broadly: "The alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any surface or subsurface water in the state that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property, or to public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose." Please see 16 TAC §3.8.

### How will all this activity affect our property values?

The Commission does not have any regulatory authority over the impact on property value as a result of drilling activities on your property unless a violation of Commission rules related to the prevention of pollution of usable quality water occurs. However, you should not construe that to mean you do not have legal rights with respect to the quiet enjoyment of your home. You may wish to consult with an attorney in your area to fully understand your rights and remedies available to you.

### When will they close the pit?

Railroad Commission regulations require that the operator empty and close a drilling pit within one year of cessation of drilling activities. The rules require the operator to empty a completion/workover pit within 30 days and to close the pit within 120 days completion/workover operations.

### What are saltwater disposal wells?

To learn more about saltwater disposal wells, please read our FAQ's concerning these types of wells.

### Who do I contact to file a complaint?

Please find the county and associated district from the link above "fields cover 24 counties", then contact the appropriate district office.

### What is the process a drilling company must go through to receive a drilling permit from the RRC?

To obtain a drilling permit from the RRC, an operator must have on file an active P-5 in accordance with Statewide Rule 1 (16 TAC §3.1) (SWR 1-Organization Report; Retention of Records; Notice Requirements), which identifies the operator and its officers. (Note: all RRC Rules are available on the Commission's web page at the following link: [http://texreg.sos.state.tx.us/public/readtac\\$ext.ViewTAC?tac\\_view=4&ti=16&pt=1&ch=3&rl=Y](http://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=16&pt=1&ch=3&rl=Y). The operator also must have the proper amount of financial assurance on file.

The operator must submit a site-specific Form W-1 (application to drill) with a plat to scale showing the requirements listed in Statewide Rule 5 (16 TAC §3.5) Application To Drill, Deepen, Reenter, or Plug Back.

They must submit a Form P-12 (certificate of pooling authority), a plat identifying offset operators, a service list for notice, and any waivers where applicable.

Permit Application Fees must be paid based on depth, exceptions and whether or not processing a permit application is expedited. There also are Financial Security Requirements (Statewide Rule 78 (16 TAC §3.78) Fees and Financial Security Requirements).

Do they have to show there is likely to be oil or gas in that area?

No, however, operators are required to have a legal lease, which gives them the right to extract the minerals, if any, under the surface land. In addition, they also may drill exploratory, test or service wells. These wells all require drilling permits.

Is an oil or gas operator required to perform an environmental study or something similar?

No, however, operators are required to follow all RRC regulations, which are designed to ensure protection of the public and the environment. As part of this requirement, they must obtain and file a "Water Board Letter" from the Texas Commission on Environmental Quality (TCEQ) that identifies the depth to which fresh water must be protected so the well can be designed to ensure protection of subsurface freshwater.

What factors are considered in reviewing a drilling permit application, and who specifically approves this application (district office supervisor? commissioners?)

Prior to permit approval, a check of all required data is conducted including, but not limited to, the following:

- Survey name and distances from lease lines and between wells.
- Lease name, well number and operator name
- Distances to nearest well, acreage and lease distances (relating to the field rules)

Check for exceptions to rules 16 TAC §3.37 (Statewide Spacing Rule), §3.38 (Well Densities), §3.39 (Proration and Drilling Units: Contiguity of Acreage and Exception Thereto), §3.40 (Assignment of Acreage to Pooled Development and Proration Units).

When exceptions to these above rules are requested, the RRC verifies that the correct documentation is attached.

The RRC checks to make sure all information on the plat matches the information above.

The Drilling Permits Unit administratively approves or denies most regular permits and some exception to rules permits. However, protested permits regarding 16 TAC §3.37, most §3.38 permits, all §3.39 and §3.40 exception permits are set for hearing and will require Commission approval or disapproval.

How often are wells inspected?

Wells are not inspected on a set schedule. The frequency of a routine well/lease inspection is based on many factors including the type of well/operation, the location of the well in regard to public areas or sensitive environments, and the compliance record of the operator. Other actions that may trigger an inspection include a third-party complaint, notice to the Commission of a reportable incident (spill, fire, blowout), or notice of a specific job such as a casing job, plugging job, or mechanical integrity-test. During FY 09, the Commission oil and gas inspectors performed 128,270 inspections statewide.

### What types of things do inspectors look for?

This depends on the type of well/operation. In general, the inspector will confirm compliance with all applicable statewide rules with emphasis on rules related to public safety and protection of the environment. For example, an inspection of a lease might include an inspector noting whether proper signs are posted at the lease; is gas being flared illegally; or are there any spills or leaks from equipment or pits.

### Can the RRC assist with mineral lease agreements?

With respect to entry into lease agreements and actions of individuals, please be advised that the Railroad Commission's jurisdiction is limited to issues concerning the permitting and production from oil and gas wells in the State of Texas. The Commission has no jurisdiction over property interests or contractual rights, including issues regarding the validity of existing oil, gas and mineral leases and the conduct of individuals attempting to obtain leases. If you have a question concerning the validity of an existing lease or the actions taken by individuals in an attempt to secure the rights to develop the minerals within a particular area, you may wish to consult an attorney with expertise in oil and gas law.

The Commission does maintain records regarding the reported production and disposition of all oil and gas produced from wells in the State. This information may be helpful in determining your interests and any development in the area surrounding your property. Additionally, the Commission also maintains records regarding the permitting of wells. These records include plats and other documents designating the acreage in a pooled unit. These records are required to obtain a drilling permit and for production after a well is completed.

If you have the RRC Identification Number for a well (either a five digit number for oil wells or a six digit number for gas wells) you can obtain all reported production information from January 1993 to present and can obtain access to the permitting records at the Commission's website <http://www.rrc.texas.gov>. For production information, please use the Commission's Production Data Query application to get access to the on-line database for these records. For drilling permit information, please use the Commission's Drilling Permit application to get access to the on-line database for these records.

### I have heard about radiation issues associated with oil and gas activities. What are the issues and risks?

Subsurface formations may contain low levels of radioactive materials such as uranium and thorium and their daughter products, radium 226 and radium 228. These materials, called Naturally Occurring Radioactive Materials or NORM, can be brought to the surface in the formation water that is produced in conjunction with oil and gas operations. NORM in these produced waters typically consists of the radionuclides, radium 226 and 228. In addition, radon gas, a radium daughter, may be found in produced natural gas. Because the levels typically are so low, the NORM in produced waters and natural gas is not a problem in Texas unless it becomes concentrated in some manner. Through temperature and pressure changes that occur in the course of oil and gas production operations, radium 226 and 228 found in produced waters may co-precipitate with barium sulfate scale in well tubulars and surface equipment. Concentrations of radium 226 and 228 may also occur in sludge that accumulates in oilfield pits and tanks. These solids become sources of oil and gas NORM waste. In gas processing activities, NORM generally occurs as radon gas in the natural gas stream. Radon decays to Lead-210, then to Bismuth-210, Polonium-210, and finally to stable Lead-

206. Radon decay elements occur as a film on the inner surface of inlet lines, treating units, pumps, and valves principally associated with propylene, ethane, and propane processing streams. The highest risk of exposure to oil and gas NORM is to workers employed to cut and ream oilfield pipe, remove solids from tanks and pits, and refurbish gas processing equipment.

Regulatory programs for NORM are administered by both the Texas Department of State Health Services (DSHS) and the Railroad Commission (RRC). The DSHS regulates all activities, except disposal, involving management of NORM and NORM containing or contaminated materials. This includes jurisdiction over possession, use, transfer, transport, recycling, decontamination of equipment and facilities and/or storage of oil and gas NORM wastes, other than such activities when they occur at the site (e.g., lease, unit, or facility) where disposal of oil and gas NORM waste will occur. The DSHS's radiological program protects the occupationally exposed as well as the public from unnecessary exposure to radiation. The DSHS regulations establish protection standards and requirements for management of NORM, other than disposal. The rules include exemption criteria for certain NORM containing or contaminated materials. Anyone managing NORM materials above the exemption levels must comply with certain standards.

The RRC has jurisdiction over disposal of oil and gas NORM waste and the management of NORM waste at an oil and gas property to facilitate disposal at the site. The RRC's rules were developed in consultation with the DSHS regarding protection of public health and the environment. The relation of exposure pathways and the health risks relative to those pathways was DSHS's basis for adopting the regulatory exemption levels. Likewise, the adoption of oil and gas NORM waste disposal options is a result of evaluation of the risk relative to each disposal method.

Each agency is responsible for enforcing its own rules; however agencies do communicate with each other on particular sites or issues as necessary and participate (along with the Texas Commission on Environmental Quality) in quarterly Texas Radiation Advisory Board (TRAB) meetings.

For background on oil and gas NORM you may also want to review the following link on our website.

### What is H<sub>2</sub>S gas?

Hydrogen sulfide is a very deadly gas that can kill within minutes. Hydrogen sulfide gas is encountered in many oil and gas producing formations in the state of Texas and, therefore, can be present at drilling locations, producing wells, tank batteries, production facilities, gas plants, sweetening plants, pipelines, etc. For more in depth information regarding H<sub>2</sub>S, please [click here](#).

### Is H<sub>2</sub>S present in any of the Eagle Ford shale fields?

Currently, one field has been identified with H<sub>2</sub>S - the Eagleville (Eagle Ford Sour) field in Frio County. Please contact us with comments and suggestions concerning the Eagle Ford Information web area.